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Soggetti	Renewable energy sources Cogeneration of electric power and heat Fossil fuels Engines Renewable Energy Fossil Fuel Engine Technology
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Nota di contenuto	Performance of Thermo-Chemical Bio-Ethanol Production from Agricultural Waste Through Polygeneration: Multi Dimensional Assessment -- Development of a Novel Combustor For Low Emission Combustion of Biofuels -- Sustainable Production of Value-added Chemicals and Energy Fuel Precursors from Lignocellulosic Biomass Through Chemical Catalysis -- Microbial Electrochemical Platform: Biofactory with Diverse Applications -- Various Aspects of Pretreatment Strategies of Lignocellulosic Biomass Towards Ethanol Yield -- Role of Hydrothermal Liquefaction Processes in an Integrated Biorefinery -- Ultrasound-Assisted Biodiesel Synthesis: Perspectives, Opportunities and Challenges -- Production of Biodiesel From Carbon Dioxide Concentrating Micro-Organisms -- Meta-Model Driven Multi-Objective Optimization in the Performance-Emission Trade-Off Paradigm of a Diesel-Hydrogen Dual Fuel Operation: A Case-Study -- Production of Biodiesel Through Hydrodynamic Cavitation and Ultrasonic Energy and Its Performance in Diesel Engines -- Microalgae Based Biofuels:

Challenges and Opportunities -- Effect of Blending Alcohols on Performance and Exhaust of Kerosene Fuelled 4-Stroke Genset -- Surrogates for Biodiesels: Review and Challenges.

Sommario/riassunto

This book is intended to serve as a compendium on the state-of-the-art research in the field of biofuels. The book includes chapters on different aspects of biofuels from renowned international experts in the field. The book looks at current research on all aspects of biofuels from raw materials to production techniques. It also includes chapters on analysis of performance of biofuels, particularly biodiesel, in engines. The book incorporates case studies that provide insights into the performance of biofuels in applications such as automotive engines and diesel generators. The contents of the book will be useful to graduate students and researchers working on all aspects of biofuels. The book will also be of use to professionals and policymakers interested in biofuels.
